

What is claimed:

1. A utility meter incorporating ANSI C12.19 data structures comprising:
  - a security component for determining whether an externally generated access key is the same as an internally generated access key; and
  - a bypass component for enabling a data access operation by an external device without reference to Decade4 table parameters.
2. The meter of claim 1, the security component further comprising:
  - a security key generator for generating a security key.
3. The meter of claim 2 wherein the security key generator generates the security key from variable data and data associated with the meter.
4. The meter of claim 3 wherein the security key generator arithmetically combines the variable data and the data associated with the meter to generate the security key.
5. The meter of claim 2, the security component further comprising:
  - an access key generator for generating an access key from the security key.
6. The meter of claim 5 wherein the access key generator augments the security key before generating the access key.

7. The meter of claim 5, the security component further comprising:

An access key comparator for comparing the access key generated by the access key generator to an access key received from an external device.

8. The meter of claim 7, the bypass component further comprising:

a data access monitor for monitoring data access operations performed by the external device and resetting the access key comparator in response to a data access being performed by the external device.

9. The meter of claim 8, the bypass component further comprising:

A unlock timer for timing an interval corresponding to a data access operation and for resetting the access key comparator in response to a data access being performed by the external device.

10. The system of claim 1 wherein the bypass component enables a single data access operation by the external device.

11. The system of claim 1 wherein the security component and bypass component are implemented by a procedure.

12. The system of claim 11 wherein the procedure is a computer program executed by a processor in the utility meter.

13. A method for modifying a read-only table in a utility meter comprising:
- receiving a request for a security key;
  - generating a security key;
  - generating an access key from the security key;
  - comparing the generated access key to an externally generated access key;
  - and
  - enabling a data access operation to occur without reference to security access tables.
14. The method of claim 13, the security key generation including:
- arithmetically combining variable data with data associated with a utility meter to generate the security key.
15. The method of claim 13, the access key generation including:
- augmenting the security key before generating the access key.
16. The method of claim 13 wherein the data access enabling includes:
- monitoring for a data access operation by an external device in response to the comparison of the access keys being the same.

17. The method of claim 16 wherein the data access enabling includes:

- timing a data access interval; and
- resuming security processing with reference to security tables in response to the data access interval time expiring.

18. The method of claim 13, the access key generation including:

- generating the access key with an encryption function.

19. The method of claim 13, the access key generation including:

- generating the access key with a hashing function.